

**CLAIMS**

1. A glazing assembly comprising at least one transparent substrate, especially made of glass, provided with a thin-film multilayer comprising, in the following order starting from the substrate, at least:
  - 5 (a) a first dielectric layer comprising a barrier layer acting as a barrier to the diffusion of oxygen and chosen from silicon nitrides;
  - (b) a lower stabilizing layer made of a metal or metal alloy X;
  - (c) a functional layer having reflection properties in the infrared and/or in the solar radiation, especially a metal layer;
  - 10 (d) an upper metal blocking layer made of a metal or metal alloy Y;
  - (e) a second dielectric layer comprising a barrier layer acting as a barrier to the diffusion of oxygen and chosen from silicon nitrides; and
  - (f) optionally, a protective oxide layer;in which multilayer the metal or alloy X of the lower stabilizing layer is different  
15 from the metal or alloy Y of the upper blocking layer.
2. The glazing assembly as claimed in claim 1, characterized in that the thickness of the dielectric layer (a) and (e), respectively, is at least 5 nm, especially between 15 and 70 nm.
3. The glazing assembly as claimed in any one of the preceding claims,  
20 characterized in that the stabilizing lower metal layer (b), respectively the upper metal layer (d), is made of a metal or alloy X, respectively Y, chosen from titanium, nickel, chromium, niobium, zirconium, tantalum, aluminum or a metal alloy containing at least one of these metals.
4. The glazing assembly as claimed in claim 3, characterized in that the  
25 stabilizing lower metal layer (b) is made of a nickel-chromium alloy.
5. The glazing assembly as claimed in any one of the preceding claims, characterized in that the thickness of the layer (b) is between 1 and 6 nm.
6. The glazing assembly as claimed in any one of the preceding claims, characterized in that the layer (c) is a metal layer based on silver, titanium,  
30 palladium or gold.
7. The glazing assembly as claimed in claim 6, characterized in that the layer (c) has a thickness of 6 to 12 nm.
8. The glazing assembly as claimed in claim 3, characterized in that the upper metal blocking layer (d) is made of a metal Y chosen from titanium, zirconium,

10. The glazing assembly as claimed in one of the preceding claims, characterized in that the thickness of the layer (b) is greater than that of the layer (d).

10 12. The glazing assembly as claimed in any one of the preceding claims, characterized in that it comprises an outer layer (f) based on an oxide of at least one metal chosen from Zn, Al, Ti, Sn, Zr, Nb, W, Ta.

15           .../silicon nitride/nickel-chromium/Ag/titanium/silicon nitride/...

                  (a)                   (b)                   (c)                   (d)                   (e)

.../silicon nitride/nickel-chromium/Ag/titanium/silicon nitride/nickel-  
20 chromium/Ag/titanium/silicon nitride/...

16. The glazing assembly as claimed in any one of the preceding claims, characterized in that it has a selectivity defined by the ratio of the light transmission to the solar factor,  $T_L/SF$ , of between 1.25 and 1.45.

18. The glazing assembly as claimed in any one of the preceding claims, characterized in that the substrate, once it has been provided with the thin-film multilayer, undergoes a heat treatment at more than 500°C, of the bending, toughening or annealing type, especially with an average light transmission change  $\Delta T_L$  induced by the heat treatment of at most 3%, preferably around 2%, and/or an average change in colorimetric response in reflection induced by the heat treatment  $\Delta E^*$  of at most 3, especially 2.5.

19. Application of glazing assemblies as claimed in any one of the preceding claims to the production of a glazed unit comprising at least one glazing assembly that has undergone a heat treatment and at least one glazing assembly that has not undergone heat treatment.
- 5 20. A glazed unit incorporating several glazing assemblies as claimed in any one of claims 1 to 18.
21. The glazed unit as claimed in the preceding claim, characterized in that it incorporates at least one glazing assembly that has undergone a heat treatment and at least one glazing assembly that has not undergone heat treatment.